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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,256	01/27/2005	Matthew Spencer Collins	PG4902USw	1132
23347 7590 12/26/2008 GLAXOSMITHKLINE CORPORATE INTELLECTUAL PROPERTY, MAI B482 FIVE MOORE DR., PO BOX 13398 RESEARCH TRIANGLE PARK, NC 27709-3398				
EXAMINER BAINBRIDGE, ANDREW PHILIP				
ART UNIT 3754		PAPER NUMBER		
NOTIFICATION DATE 12/26/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/523,256

Applicant(s)

COLLINS ET AL.

Examiner

ANDREW P. BAINBRIDGE

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3 and 5-32 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1 and 6 are objected to because of the following informalities: in claim 1, line 22, the phrase "with a toothed rack attached", but in claim 6 lines 2-3, the phrase "comprises at least a first lever and a second lever, and *each* toothed rack has...". The Examiner believes that this suggests that claim 1 refers to a singular toothed rack, and claim 6 refers to plural toothed racks. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. **Claim 6 is rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claim 6 depends from claim 1, and claim 1 refers to "a toothed rack" and claim 6 refers to "each toothed rack". It is unclear if claim 6 is referring to either one or more than one toothed racks.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 1-3, 5-7, 20-21, 23 and 26-32 are rejected under 35 U.S.C. 103(a)** as being unpatentable over US 3,272,391 (Meshberg) in view of US 2002/0008122 (Ritsche et al.).

7. Meshberg in figures 1-6 discloses a fluid dispensing device 10 with a housing 15, 22 and a nozzle 14 and a fluid discharge device 11-13 wherein a container 11 is driven toward the nozzle 14 by moving in relation to a pump with a valve 12 that dispenses fluid through the nozzle 14 when the device is activated by squeezing a pair of oppositely arranged finger levers 25 that are pivoted 27 on the housing 15 near the end of the container holding the nozzle 14 that at rest project through the housing front and rear walls 15 (see figure 5), the pump 12 fed fluid from the reservoir 14 by the suction inlet 13, the device having a front, rear and two opposing side walls 22-23 (figures 4-5, col. 3, lines 65-75, col. 4, lines 1-8, 23-30).

Meshberg lacks teaching the specific use of various listed fluids of claims 26-32, except for a medicament (col. 1, lines 20-30). The selection of different fluids and preferred materials to fill the reservoir is simply a matter of an obvious design choice. It would have been obvious to one having ordinary skill in the art since it has been held to

be within the general skill of a worker in the art to select a known material in the basis of its suitability for an intended use as a mater of obvious design choice. *In re Leshin*, 125 USPQ 416.

Meshberg lacks teaching a toothed portion on the two levers for engagement with a toothed rack with teeth facing both levers to form a matching set of teeth, in order to create a driveable connection between the toothed lever and the toothed rack, the toothed rack aligned with the nozzle of the dispenser, such that when the levers are actuated, the levers pivot, the teeth move the toothed rack, and the toothed rack moves the container so that the pump is actuated. Ritsche in figure 6 teaches a pair of toothed levers 24, 50 that are in a drivable connection with a toothed rack 49 that has two sets of teeth, each set facing one of the pair of levers, the toothed rack aligned with the nozzle. It would be obvious to one of ordinary skill in the art to adapt Ritsche to Meshberg to create a device with a pair of toothed levers that connect and drive a toothed rack that is connected to the container such that when the levers are actuated, the teeth push the toothed rack, which in turn moves the container such that the fluid is dispensed.

8. **Claims 8-10 and 16 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Meshberg in view of Ritsche as applied in claims 1 and 7 respectively, and further in view of US 6,568,389 (Rand et al.).

9. Meshberg in view of Ritsche as applied in claims 1 and 7 respectively have all fo the elements of claims 8-10 and 16 except for two toothed racks located on opposite sides of the cylindrical neck with each of the levers having two sets of teeth, one for

each toothed rack. Rand in figures 5a-5c teaches a pair of rack and pinion systems 470, 472, 474, 480, 482, 484 that control the actuation of an inhaler nozzle 490. it would be obvious to one of ordinary skill in the art to adapt the twin sets of toothed racks of Rand to the Meshberg-Ritsche combination in order to create a pair of toothed racks that are located on opposite sides of the nozzle that cooperate with two sets of teeth from each toothed lever.

10. **Claims 11-12, 14 and 24-25 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Meshberg in view of Ritsche as applied in claims 7, 21, and 1 respectively, and further in view of DE 19610456 (Fuchs).

11. Meshberg in view of Ritsche as applied in claims 7, 21, and 1 respectively has all of the elements of claims 11-12, 14 and 23-25 except that the toothed rack is connected to a collar which integrally connects the toothed rack to a circumferential groove of the neck portion of the container, each lever having a finger grip, and each lever having a pivot point on the housing to actuate the collar. Fuchs in figures 1 and 6 teaches a lever 45 with finger grips 14 with a pair of levers 63 that attach to a collar 39 which seats in a recessed area of the neck of the container 40 with a pivot point 41 on the housing 15 for the lever to actuate the collar 39. It would be obvious to one of ordinary skill in the art to adapt Fuchs to the Meshberg-Ritsche combination because Fuchs teaches a way to connect the levers to a collar in such a way that the system could be adapted in order to create a set of levers that connect to a toothed rack that in turn is formed as part of the collar that is then seated in a recessed portion of the container neck.

12. **Claims 13, 15 and 17-19 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Meshberg in view of Ritsche as applied in claims 12, 14 and 16 respectively, and further in view of Rand and Fuchs.

13. Meshberg in view of Ritsche as applied in claims 12, 14 and 16 respectively has all of the elements of claims 13, 15 and 17-19 except for the collar being connected to two toothed racks that are formed integrally with the collar, such that as the toothed levers actuate, the toothed racks move, which in turn moves the collar, which in turn moves the container to actuate the pump, each toothed lever having two sets of teeth each, one to match with each of the two toothed racks, the lever having a U-shaped cross section, with a bridging portion, the end of each of the levers having two flanges. Fuchs in figure 2 teaches a U-shaped lever 39 with two flanges that project toward the left of figure 2 that can be readily adapted to include two sets of teeth on the flanges, and in figure 6 teaches a collar 39 that is integrally formed with two frames 63 which could readily serve as either levers or the location of two toothed racks on either side of the collar. Rand as described above teaches in figures 5a-5c a set of rack and pinion toothed racks that teach that two toothed racks located on opposite sides of a nozzle 490 can successfully create the actuation of a nozzle. It would be obvious to one of ordinary skill in the art to adapt Rand and Fuchs to the Meshberg-Ritsche combination to create a device that has two toothed levers on opposite sides of a housing and nozzle that move two sets of teeth each to translate motion to two sets of oppositely positioned toothed racks which in turn connect together on a collar that moves a container reservoir which in turn actuates a pump to dispense fluid because this

arrangement creates a reliable and repeatable amount of dispensed product which is incredibly important when dispensing medicine while also reducing the chance of picking or twisting the nozzle or medium pathway by ensuring that the actuation is accomplished in a symmetrical way, thereby increasing the reliability of the device.

14. **Claim 22 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Meshberg in view of Ritsche as applied in claim 20, and further in view of US 2,662,405 (Tapscott).

15. Meshberg in view of Ritsche as applied in claim 20 has all of the elements of claim 22 except for the housing walls having a aperture to view the fluid level of the container. Tapscott in figure 3 teaches a clear galss aperture 14-15, 17 in order to view the fluid level within the container. It would be obvious to one of ordinary skill in the art to adapt Tapscott to the Meshberg-Ritsche combination because Tapscott teaches a well known and reliable way to provide feedback to the end user so that the container can be replaced before it is too late.

Response to Arguments

16. Applicant's arguments with respect to claims 1-3, 5-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW P. BAINBRIDGE whose telephone number is (571)270-3767. The examiner can normally be reached on Monday to Thursday, 9:30 AM to 8:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. P. B./
Examiner, Art Unit 3754

/LIEN TM NGO/
Primary Examiner, Art Unit 3754

December 22, 2008